## Responses to Comments in Letter 49 from Doris Redekop, Abbotsford Resident

***Note: The responses listed below are numbered to correspond to the numbers shown in the right-hand margin of the preceding comment letter.***

1. Please see General Response B for discussion of power line impacts in Abbotsford.

2. See Letter 3, Response to Comment 4.

3. Please see General Response B for discussion of power line impacts in Abbotsford.

4. Thank you for your comments.

5. Please see General Response D, which addresses potential impacts to the Sumas aquifer from the groundwater extraction for the S2GF project.

6. The commentor is one of several who expressed concern over disposal of wastewater from the S2GF project at the JAMES Treatment Plant in Abbotsford. Please see General Response I, which addresses this comment and related concerns.

7. It is recognized that during certain times of the year haze can be a problem in parts of the Lower Fraser Valley. Visibility (or the clearness with which an object stands out from its surroundings) is a result of a complex series of interactions between light, fine particles, and gases in the atmosphere. In general, visibility deteriorates due to an increased amount of visibility-reducing particles and gases. Studies also show that visibility perception depends on variables such as sky conditions, the background vista, and a number of human factors. What may be acceptable to one person may not be acceptable to another. Furthermore, judgements may change depending on location, the vista, and viewing locations.

   In the United States, 24-hour average extinction coefficients are used as a measure of regional haze. Increased extinction causes reduced visual range. A 5 percent change in extinction is generally used to indicate a "just perceptible" change to a visual landscape. (Exhibit 25, page 15). Under conditions of gas firing, predicted extinction coefficients are less than the 5 percent criterion, indicating that that visual conditions would not be perceptible when the proposed facility was gas fired. Under oil-fired conditions, however, modeling predicted that oil-fired emissions combined with unfavorable meteorology could result in perceptible regional haze in Olympic National Park and North Cascades National Park. However, the meteorological conditions that resulted in the predicted visibility impacts in the parks are not the same as those that would trigger oil firing at the facility (i.e., very low temperatures resulting in gas shortages). Because the probability of a gas shortage is low when temperatures are not extreme, it is unlikely the adverse visibility impacts would actually occur. (Exhibit 25, page 15)

   No formal visibility standards have been adopted for the Lower Fraser Valley. Based on one year of model predictions, worst-case estimates (the upper bound of a range of estimates) indicate that a slight reduction in visibility could be expected for up to 14 days

per year due to emissions from the proposed facility. The view from Abbotsford to Sumas Mountain is expected to be the most affected. Oil-firing during the winter is expected to result in the greatest visibility impacts. If oil-firing occurs, a slight reduction in visibility could occur for every oil-firing day, up to a maximum of 15 days. The British Columbia Ministry of Environment, Land and Parks (MELP) concluded that the estimates were worst-case and likely over-estimate the actual impacts because they assume consistently good baseline visibility conditions. (Volume I, Appendix K).

8. Carbon dioxide emissions from the facility (approximately 2.4 million tons per year) would equate to approximately 500,000 vehicles on an annual basis, not daily basis as stated in the comment.

9. The EIS evaluated toxic emissions using the same dispersion modeling methods as were used for other criteria pollutants. Maximum 24-hour and annual toxic air pollutant concentrations attributable to the proposed facility and comparisons to Washington State Department of Ecology standards are shown in Tables 3.1-13 and 3.1-14 of the Draft EIS. The 24-hour maximum and annual predictions are all less than the regulatory limits under all operating scenarios for the proposed facility. In addition, technical staff from the Canadian MELP concluded that toxic emissions from the proposed facility would not exceed established regulatory limits or applicable British Columbia objectives for air toxics (Volume I, Appendix K).

10. Thank you for your comments.

11. Thank you for your comments.

12. Thank you for your comments.